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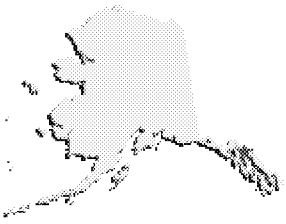
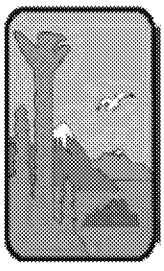


ALASKA
Department of
Environmental
Conservation



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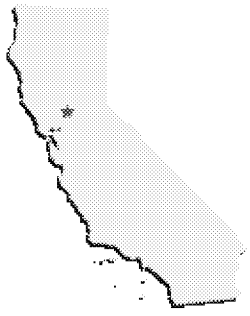
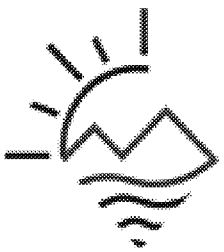
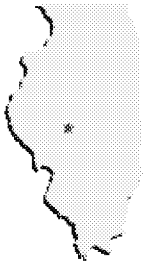




DEPARTMENT OF TOXIC
SUBSTANCES CONTROL

JUSTICE



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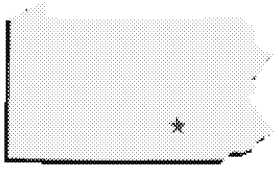

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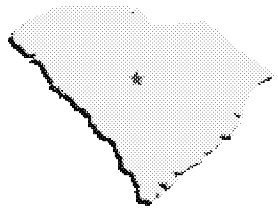

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Draft Results from State Environmental Justice Cooperative Agreement (SEJCA) Program

1.0 Introduction

In October 2009, the U.S. Environmental Protection Agency awarded funding through a competitive process, of $160,000 to each of five states to conduct specific projects under the State Environmental Justice Cooperative Agreement (SEJCA) program. This program was developed as a pilot by the EPA's Office of Environmental Justice (OEJ), with input from the National Environmental Justice Advisory Council (NEJAC), the Environmental Justice Steering Committee (EJESC), and the Environmental Council of the States (ECOS).

The purpose of the SEJCA pilot is to support state activities that lead to measurable environmental or public health results in vulnerable and underserved communities that are disproportionately burdened by environmental harms and risks by leveraging and making use of the existing resources and assets of state agencies. The program design encourages state governmental entities to work collaboratively with an affected community to understand, promote, and integrate approaches to provide meaningful and measurable improvements to its public health and environmental surroundings. Based on responses to a request for proposals (RFP), the SEJCA pilot program awarded funding to five state environmental agencies to support their proposed efforts to mitigate environmental justice concerns in specific affected communities using strategies that have the potential to be broadened for use in other communities across the state.

The five state projects supported through SEJCA are listed below:

- The **Alaska Department of Environmental Conservation (ADEC)**: The Tribal Participation Protocol Development Project is designed to work with Alaska Native tribal organizations to establish an early notification protocol for the Alaska Pollutant Discharge Elimination System (APDES) permitting program.
- The **California Department of Toxic Substances Control (DTSC)**: The Building Healthy Communities and Schools project is working with community representatives, and local, state, and federal regulatory agencies to coordinate multiple environmental pollution mitigation activities.
- The **Illinois Environmental Protection Agency (IEPA)**: The East St. Louis Residential Lead Paint Outreach Collaborative project involves community outreach and training to educate and involve residents in lead abatement from lead-based paint contamination.
- The **Pennsylvania Department of Environmental Protection (PA DEP)**: The Chester Home Asthma Prevention Program (CHAPP) project involves working with the Chester Environmental Partnership and the Crozer-Keystone Health System to address asthma triggers, solid waste disposal, and children's environmental health.
- The **South Carolina Department of Health and Environmental Control (SC DHEC)**: The Leaders for Environmental Action Pilots (LEAP) project involves implementing a pilot program using collaborative problem-solving to address the environmental and social justice concerns within four selected communities.

All of these projects were expected to be completed by September 30, 2012; one or more of them may be extended to complete ongoing activities.

The purpose of this report is to summarize the results of the five state projects to highlight their successes and challenges and to document experiences and insights from key state and federal representatives who managed the

SEJCA program. In addition, this report presents a number of recommendations that are intended for application to future projects under the SEJCA and other community-based programs.

2.0 Program Description

The goals of the SEJCA program, as provided in the [HYPERLINK "http://www.epa.gov/compliance/environmentaljustice/resources/publications/factsheets/fact-sheet-ej-sejca-grants-2009.pdf"], include:

- Achieve measurable and meaningful environmental and public health results in communities.
- Build broad and robust, results-oriented partnerships, particularly with community organizations within affected areas.
- Pilot activities in specific communities that create models, which can be expanded or replicated in other geographic areas.
- Strengthen development and implementation of specific approaches to achieve environmental justice.

To implement the SEJCA program, an RFP was developed using a multi-tiered process of stakeholder participation. The OEJ provided information to several key stakeholder groups, both internal and external, including the EJESC, the Environmental Justice (EJ) coordinators, and representatives from the EPA Community Action for a Renewed Environment (CARE) Program, NEJAC, and ECOS.

At the ECOS annual meeting held in Branson, Missouri, in September 2008, the EPA Office of Enforcement and Compliance Assistance (OECA) Assistant Administrator Granta Nakayama presented a briefing about the developing program. All 16 states represented at the meeting expressed interest and support for the program. Draft materials were developed and reviewed in several rounds in the summer and fall of 2008. While no formal review and comment document was developed, participants were able to provide comments on draft documents during conference calls held throughout the development cycle.

The RFP was posted on February 13, 2009. The EPA received numerous applications and selected the five state projects that best met the program goals. After the awards, OEJ began working with the five state awardees and with the appropriate EPA regional offices to begin assisting them with implementation of their proposed projects.

3.0 Methods

The methods used in this report involved the following types of document reviews and interviews:

Document reviews included:

- The five original proposals that were submitted by the states to the OEJ.
- Progress reports prepared by each state and submitted to its EPA regional office.
- Progress reports submitted to OEJ from each regional office involved in SEJCA work.
- Outputs from state activities.

Regional and state representatives involved in SEJCA work were interviewed to:

- Obtain data and project information not found in the reviewed documents.
- Obtain insights and impressions on possible program improvements.

A significant portion of the information that was gathered for this report was used to prepare a synopsis of each SEJCA project that is designed to allow readers to quickly become familiar with each project and determine how it might apply to environmental justice work being considered in other communities or states (see Appendix A). These synopses are also intended to serve as a frame of reference for the recommendations in this report.

4.0 Results

Table 1 summarizes the key results and other information from all five of the SEJCA projects. Further details on each project are available in Appendix A of this report. The following paragraphs provide brief descriptions of how each of the projects has met each of the program goals that were presented in Section 2 of this report, followed by insights that were made by various SEJCA project teams:

SEJCA funding allowed employees from all five of the states to learn more about the principles of environmental justice, which is expected to improve their consideration of EJ concerns in their day-to-day activities.

Achieving measurable and meaningful environmental and public health

- The **Alaska** project met the this program goal by facilitating collaboration on a protocol as the primary tool in a tool kit for improving the ability of tribal villages to affect the outcomes of water discharge permits that could affect their quality of life.

ADEC posted a tool kit on its [HYPERLINK]that includes a protocol, guidance document, brochure and postcard on the APDES permitting program.

- The **California** project improved the state's ability to communicate with three overburdened communities. The communities assisted state staff in maximizing the efficiency of enforcement activities, and thus reducing exposures of residents to toxins.
- The **Illinois** project reduced exposures of children in low-income communities to lead-based paint.
- The **Pennsylvania** project measurably lowered the frequency and severity of asthma attacks in a community's children.
- The **South Carolina** project trained and empowered residents and non-profit organizations in four communities to become part of the decision processes for revitalizing their communities.

Table [SEQ Table * ARABIC]: Summaries of State Environmental Justice Cooperative Agreement Projects

STATE	PROJECT INFORMATION							
	Project Name	**Lead State Agency**	**Main Goals**	**Target Community**	**Key Partners**	**Basic Project Strategy**	**Major Successes**	**Insights from Project Teams**
ALASKA	Tribal Protocol Project (TPP)	Alaska Department of Environmental Conservation (ADEC)	Improve tribal inputs on water permits and ADEC understanding of EJ issues.	Six Tribal Councils near rivers in west-central Alaska.	Two tribal leaders from each of the six tribal councils.	Negotiate a protocol and conduct training workshops guided by a consultant.	All six tribal organizations signed the protocol, which is now in use.	A consultant was critical for identifying key tribal partners.
CALIFORNIA	Building Healthy Communities and Schools (Identify, Reduce, Eliminate)	California Department of Toxic Substances Control (DTSC)	Train, empower, and improve enforcement in three communities and improve DTSC understanding of EJ issues.	Three communities in the greater Los Angeles area.	Community residents and staff from many DTSC programs.	Meet with the communities to learn their concerns and report progress back to them in 100 days.	DTSC has gained trust from communities and used their inputs for improved enforcement efficiencies.	Information from community residents can greatly increase enforcement efficiencies.
ILLINOIS	East St. Louis Residential Lead Paint Outreach Collaborative	Illinois Environmental Protection Agency (IEPA)	Reduce exposures to lead-based paint and improve IEPA understanding of EJ issues.	Low income neighborhoods in East St. Louis.	East Side Health District and St. Clair County.	Lead paint awareness outreach to the community and training of repair contractors.	More families know how to keep their children safe from exposures to lead paint.	-to be added
PENNSYLVANIA	Chester Home Asthma Prevention Program (CHAPP)	Pennsylvania Department of Environmental Protection (PA DEP)	Reduce asthma and exposures to solid waste in the City of Chester and improve PA DEP understanding of EJ issues.	Low income neighborhoods in Chester, Pennsylvania.	Chester Environmental Partnership, and Crozer-Keystone Health Systems.	Interventions for households with asthma sufferers and cleanup of solid wastes in vacant lots near those households.	The asthma program enrolled 132 children, significantly reducing asthma frequencies and hospital visits.	Networking with a strong community organization ensured assembly of an effective project team.
SOUTH CAROLINA	Leaders for Environmental Action Pilots (LEAP)	South Carolina Department of Health and Environmental Protection (DHEC)	Train and empower 4 communities for redevelopment and improve DHEC understanding of EJ issues.	Four communities across the state.	Four non-profit community-based organizations.	Training and grants to four non-profit organizations to help revitalize four communities.	The communities became more capable of addressing environmental and health issues.	Inputs from state and federal staff improved community problem-solving skills.

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Build broad and robust, results-oriented partnerships

- **ADEC's** achievement of this program goal is reflected in the signed protocol that resulted from partnerships with six tribal governments. This protocol is available on[HYPERLINK "http://dec.alaska.gov/water/TribalCommunication/tribes.html"] along with other tools that were developed under the SEJCA project.

> The California DTSC initiated a series of monthly training programs presented in Spanish and English. Topics included inspections, compliance, enforcement, permitting, the corrective action process, and California's green business program.

- The **California** project developed partnerships with three communities whose residents provided their knowledge of suspected illegal environmental practices. This allowed DTSC to be more efficient in investigating and resolving potential exposure issues in these communities.
- The **IEPA's** internal partnerships allowed it to leverage the use of a real-time lead-detection technology known as X-ray fluorescence (XRF) to sample homes for lead-based paint. The IEPA's partnership with the East Side Health District enabled extensive blood sampling to measure blood lead levels in the children from homes that contained lead-based paint.
- A strong partnership between the **PA DEP** and the Chester Environmental Partnership (CEP) was a major factor in assembling the project team and the ultimate success of this project. The leader of the CEP leveraged his strong ties to the health care organization that agreed to lead the asthma-reduction portion of the project. For the solid-waste cleanup portion of the project, he leveraged strong ties with the City of Chester, which donated numerous 30-cubic-yard dumpsters and arranged for disposal of many tons of wastes that had been dumped in vacant lots in a number of neighborhoods.
- The partnerships with four non-profit community based organizations allowed the **South Carolina** project team to provide information and guidance that helped these organizations move forward on redevelopment of their communities.

> The Illinois SEJCA project provided brochures, coloring books, and pamphlets to more than 1,000 residents potentially exposed to lead-based paint.

Pilot activities in specific communities to create models, which can be expanded or replicated

All five of the SEJCA projects incorporated activities to create models or conducted activities that were based on models used in previous EPA community based projects. For example:

- **ADEC** intends to expand or replicate the use of the model APDES protocol forged with six tribal governments to address permitting issues with other tribal governments across the state. In addition, **ADEC** is expecting to use the model protocol as a template to develop similar protocols for permitting actions that affect other environmental media.
- The **California DTSC** had great success in gaining the trust of three communities with a model of listening to community issues and then returning to the community within 100 days to report new information regarding each issue.

- The **IEPA** used specific activities, including blood lead testing and awareness training, that were developed during previous EPA community-based projects and have since become models for addressing lead poisoning in children and to train construction workers on how to conduct lead abatement in homes that contain lead-based paint.
- PA **DEP's** project is unique in that it leveraged the leadership of a major health services organization, Crozer-Keystone Health Systems, to manage all of the asthma-related project activities in the Chester community. Unlike asthma control projects in many other communities, the PA DEP project conducted detailed measurements of the number of asthma sufferers who were treated and conducted statistical analysis that confirmed significant reductions in the frequencies and severities of asthma attacks. These measurements and statistics could be used as a model for conducting future asthma-related projects in Chester and in other communities across the country.

> After the SEJCA project, children in Chester, Pennsylvania, showed statistically significant improvements in asthma control test scores, in addition to statistically significant decreases in visits to the emergency room.

- The combination of activities conducted by **SC DHEC** were unique and may serve as a model for collaboration between community members, non-profit organizations, and federal, state, and, local government. The concerns of residents from the four communities and from representatives of non-profit organizations working in each of those communities were expressed during listening sessions with federal, state, and local government representatives. The residents and representatives of non-profit organizations also received training from federal, state, and local government representatives on how to strengthen their involvement in the revitalization of their communities. In addition, the four non-profit organizations were provided with grant funding to implement the training ideas and move the revitalization efforts in their communities. This model is important because it exposed many state officials to the basic concepts of environmental justice and challenged them to identify actions within their organizations' missions that could be conducted to improve environmental justice issues. Before they worked under the SEJCA project, some of those officials had not considered environmental justice to be pertinent to their organization's mission; instead, they had regarded the responsibility to consider environmental justice to apply almost exclusively to actions conducted by DHEC and the EPA.

> Under the South Carolina SEJCA project, four communities benefited from insights and knowledge provided by representatives from state and federal organizations such as the Department of Transportation, the U.S. Economic Development Administration (EDA), the Small Business Administration, the U.S. Department of Agriculture, Rural Development Program, and several colleges, including the University of South Carolina, Aiken Technical College, Bennet College, and Winthrop College.

Strengthen development and implementation of specific approaches to achieve environmental justice

The best example of achieving this program goal was demonstrated by the Alaska project, because the basic strategy of preparing a permit protocol in partnership with a number of tribal governments was specifically designed to be replicated and strengthened within the ADEC APDES program and eventually within other ADEC program permitting offices. The approaches used in the other four SEJCA projects are based on approaches that have been used in previous community based project; therefore, it is most likely that these approaches have been strengthened by the various SEJCA project teams.

Insights from SEJCA Project Teams

The main insights that were provided by the project team members who worked on the five SEJCA projects are presented in Table 1, and many more of these insights are provided in Appendix A of this report. These insights are important because they can be used to determine whether the strategies and activities of one or more of these SEJCA projects can serve as a model during the planning stages of any future project that has similar goals. For example, the positive results of the ADEC project confirmed the insight of the project team that a consultant would be necessary for collaborating with key tribal partners. This insight was based on the project team's perception that the ADEC permitting staff most likely did not have sufficient knowledge about the cultures of the tribal communities they wanted to collaborate with, or sufficient knowledge of which tribal leaders should be invited to collaborate. Because of this insight, the collaborations were successful (resulting in a signed permitting protocol) and the consultant taught 30 ADEC permit writers about the cross-cultural considerations that must be included in meetings with the six tribal governments that became partners on this project. One of the project team members noted that:

> *The SEJCA program has allowed ADEC the opportunity to expand and enrich its culture and sensitivity to Native concerns and thus improve its capacity to truly serve Native communities. In so doing, ADEC has greatly improved relations and inspired its staff to incorporate a spirit of doing business that has already changed the ADEC culture. For example, other types of permit processes are already borrowing the lessons learned from the APDES examples, such as the APDES program brochure. This all became possible by partnering with Native people and reaching out to them rather than merely sending them the required paperwork and doing the minimum effort. Because of these efforts, other ADEC programs have become aware of better ways to meet their public outreach and permitting requirements and have begun to prepare similar products. Also the current efforts to produce a cross cultural manual for APDES has been expanded to include other programs and to be used outside of the six tribes.*

The team for the California SEJCA project found that communities helped them target their enforcement activities in those areas much more efficiently. In addition, the community residents benefited greatly from information provided regarding what various state program office representatives look for during enforcement actions. The community residents noted that they were delighted to be able to meet with state officials to discuss broad issues, rather than a specific action, such as a permit or a site cleanup plan. In addition, DTSC staff has learned that non-governmental environmental justice organizations have the capability of amplifying and expediting the dissemination of training materials and grant opportunities throughout the state. Without these organizations, DTSC would not have the budget needed to reach all the communities in California.

The Illinois SEJCA project team found that … (To Be Added).

The Pennsylvania project team felt that CEP was instrumental in ensuring that the right organizations were included to ensure achievement of the two main project objectives: to aid asthma sufferers, and clean up vacant lots. It is also important to point out that the opportunity for PA DEP to build its SEJCA team arose out of its prior long-standing commitment to provide representatives at regular CEP meetings. One project team member noted that "Crozer Keystone Health System and the Chester Environmental Partnership were

integral in this project; it could not have been done without them. They were proactive and were able to leverage other resources in the community to get the work done." In addition, the Pennsylvania project team encountered some difficulties that should be considered in future projects. As is the case with applying for all types of funding, it is important for the project manager to be involved in development of the work plan and budget. In the case of this SEJCA project, the individual who created the work plan and budget was not involved throughout most of the project, which led to issues with the budget. In the end, PA DEP was able to contribute additional funds to the project; however, it is important, from the initial step, for the budget to be truth-tested with the project manager. For example, the project manager for the asthma-related portion of the project noted that this type of project is labor intensive and needs full-time peer counselors rather than part time.

The SC DHEC's greatest insight was leveraging a multidisciplinary State Environmental Advisory Committee, composed of 14 major state offices, to attend listening sessions with and provide advice to residents and non-profit organizations from four disadvantaged communities. As also noted by the California SEJCA team, the communities were extremely receptive to general meetings with state representatives that were not restricted to the discussion of upcoming permit or cleanup actions. In addition, SC DHEC gained two major insights related to working with non-profit community organizations: the need to train these organizations on the issues they wish to resolve should be carefully assessed at the beginning of the project, and the perception of community residents about these organizations should also be assessed at the outset of the project.

5.0 Findings and Recommendations

The information and experiences gathered during the past 3 years under the SEJCA program have demonstrated that this program has resulted in numerous benefits to selected communities and improved the knowledge of state environmental program staff in regard to how environmental justice concerns affect their work. In addition, these SEJCA projects reinforce the widely observed fact that typical environmental justice projects require numerous hours from project staff that are not covered by available funding. Therefore, prospective SEJCA project managers and teams should be prepared to incorporate these unfunded hours to achieve their project goals. Finally, these SEJCA projects have further illuminated the need for EPA to identify and adopt ways to leverage limited funds to resolve the EJ concerns in the hundreds of disadvantaged communities across the country. Some of the promising practices for leveraging identified in the SEJCA projects include maximizing the attendance and involvement of state officials in the meetings held by large networks and coalitions that address EJ issues; organizing listening sessions between disadvantaged communities and state, federal, local, and academic entities; and empowering community residents through training to provide information about potential contamination sources that can be used to optimize the efficiency of state enforcement actions.

> The California DTSC leveraged large environmental networks to reach as many communities as possible with limited state resources.

Based on the success described in this report, the OEJ recommends that a new round of SEJCA projects be initiated in the near future. These projects are one of the only means that the EPA has to begin spreading the integration of EJ principles in the policies, practices, and procedures conducted by state programs, which account for the overwhelming majority of permit decisions and enforcement actions across the country. This

new round of projects should be structured in a similar manner and at about the same level of funding as the first five SEJCA projects; however, they should include stronger provisions for ensuring that the project: (1) is supported by the head of the recipient's state environmental protection agency, (2) will provide activities that will require involvement by technical staff from multiple program offices within the state, (3) will require managers of technical staff to support their staff's involvement, and (4) leverages the funding in a manner that reaches as many communities as possible. In addition, the following paragraphs present some of the specific recommendations made by the project teams.

DTSC staff recommended additional grant funding opportunities that promote strategic partnerships with academia, communities, private industry, and government agencies toward identifying a community impact, documenting the impact with academic study, and developing a public health policy-to-action outcome. For example, a project is needed to address the lack of available regulations to protect public health with regard to ultrafine particles resulting from combustion and diesel exhaust.

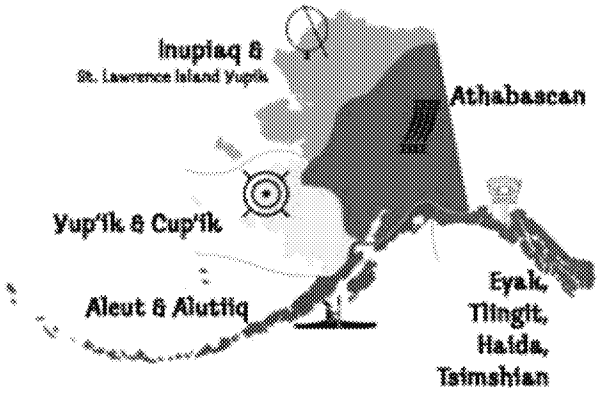
The SC DHEC project team noted that the project could have benefited from an overriding directive issued by the upper management for the other offices of DHEC to be directly involved. Instead, those offices generally worked through the project team office and did not reach out directly from their offices. Therefore, the LEAP project missed an opportunity to educate the other DHEC programs about how they could proactively integrate EJ into their programs. One of reasons was that EPA did not require the SEJCA proposals to show how the state planned to educate its own staff. One possibly lasting benefit from SEJCA, however, is the familiarity between the various state and federal staff and the four communities. If the state could help four more communities each year with meetings and capacity building, it would help foster communications and helpful exchanges in both directions. More community members would know who to call with certain types of new problems, and more state and federal workers would also know who to call with new opportunities. This type of outreach to communities would not need to be as expensive; all that is really needed is a place to get together along with money for travel. The meetings with each community could then be followed up with conference calls.

APPENDIX A
State Environmental Justice Cooperative Agreement (SEJCA) PROJECT SUMMARIES

Alaska Department of Environmental Conservation

Project Overview

The Alaska Department of Environmental Conservation (ADEC) initiated the Tribal Participation Protocol Development Project (TPP) in partnerships with six tribal communities that make up the Yukon-Koyukuk (Y-K) Subregion of the Tanana Chiefs Conference, which is a consortium of 42 tribal villages in the Athabascan Region of Alaska. These six tribal councils include the Galena Village Council, Huslia Traditional Council, Kaltag Traditional Council, Koyukuk Traditional Council, Nulato Tribal Council, and Ruby Tribal Council. Five of the communities are spread out along a 130-mile segment of the Yukon River, and one community — Huslia — is located on the Koyukuk River, approximately 180 river miles (about 70 direct miles) northeast of the confluence between the two rivers.



These six tribal communities are similar to numerous other Alaskan tribal communities that are spread across vast distances, unconnected by roads. Over the years, these and many other tribal communities have asked to have a stronger role and voice in permitting decisions under the Alaska Pollution Permit Discharge Elimination System (APDES). Tribal communities also have expressed concern related to the protection of Alaska's water from pollution to safeguard fish and other subsistence resources on which rural Native families and villages depend.

Project Goals and Major Activities

The TPP was designed to mitigate the environmental justice (EJ) concerns of six tribal communities by collaborating with them to construct a protocol for early notification and coordination of the APDES permitting program. The project also was designed to provide training and tools for implementation of the protocol. The TPP represents a pilot that included a small subset of Alaska's numerous Native organizations, with the intention of later expanding the project to include other Native organizations and potentially to include other ADEC permitting programs.

ADEC selected these six Y-K tribal councils as partners for this project because their members had worked successfully on collaborative projects with agencies in the past. The Y-K tribal councils have a structure and process in place for regular meetings of Tribal Chiefs and Administrators, with monthly teleconference calls and biannual in-person meetings. In addition to the existing regular communication

and cooperation, their organization also eased communication and cooperation with ADEC for the project. The relative homogeneity of these tribal partners regarding subsistence resources and calendar, culture, and issues of concern also facilitated effective collaboration. ADEC also hired specialized consultants to support development of appropriate training materials and to identify the most knowledgeable persons in the partner communities.

Project Successes

Under the State Environmental Justice Cooperative Agreement (SEJCA) program, ADEC was able to provide training; create outreach, guidance, and tools to facilitate tribal involvement in the APDES program and develop a communication protocol ultimately signed by the Department's Commissioner and tribal chiefs from six Y-K region villages. In addition, the project has already improved stakeholder experiences during the issuance of actual permits (see text box). Another success is that ADEC has contributed at least 0.2 full-time equivalents of staffing throughout the life of this SEJCA project, an added value estimated at approximately $57,600.

Better Communications = Improved Permits

During the early notice process for a proposed APDES permit to a small suction dredge operator, three potentially affected tribes were identified and sent informative letters and maps. One tribe expressed concerns about areas they identified as fragile and highly productive. ADEC addressed tribal concerns by incorporating restrictions that exclude discharges in subsistence resource areas used by the tribe, including beds of shellfish, eelgrass, kelp, and sea grass.

Major TPP outputs included: (1) a protocol for early notification of and coordination with tribes, (2) a guidance document on how to use the new protocol, (3) three large training workshops for tribal participants and ADEC staff on how to use the new protocol, and (4) a tool kit posted on the a Tribal Communication webpage (available at: [HYPERLINK "http://dec.alaska.gov/water/TribalCommunication/tribes.html"] and linked from ADEC's homepage) that includes the protocol, the above-mentioned guidance, and a brochure and postcard on APDES permitting. The TPP has resulted in significant improvements in the ability of the six participating tribal communities to stay informed of and contribute to permit decisions that have the potential to affect their lives. In addition, this project has led to increased awareness of ADEC Division of Water staff of potential issues concerning Native Alaskans. These positive results and especially posting the tool kit on the Internet have encouraged the staff from other ADEC permitting programs to begin using the project outputs as templates to tailor specific communication tools and protocols for their programs. In addition, ADEC expects to expand an upcoming effort to develop cross-cultural training materials within the APDES program to other ADEC programs. Perhaps the most visible success of the SEJCA project on ADEC was as a major influence in ADEC's recent appointment of a full-time EJ coordinator who will provide inputs to all EJ-related permits and other documents and direct persons with EJ-related issues to the appropriate ADEC program office.

Insights from the Project Team

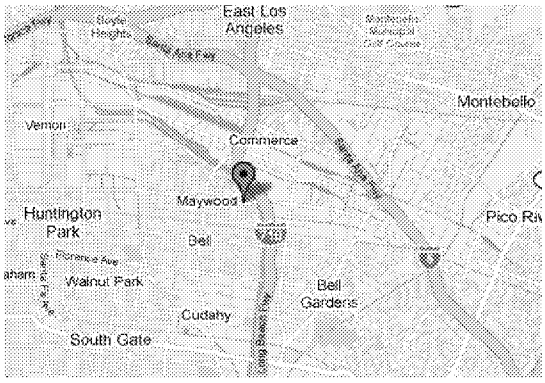
Difficulties were encountered as a result of Alaska's geography and weather, which resulted in the inability of TPP staff to attend one of the in-person meetings of the Y-K Subregion First Chiefs because a visibility obscuring snowfall closed Juneau's airport. However, an ADEC contractor was able to travel

and make the presentation on ADEC's behalf. It was ADEC's intent to travel for each meeting to the rural villages that were partners in the project; however , the schedules for air transportation to the six villages create a hardship for people within the region to access Koyukuk or Huslia because they must be routed through Fairbanks, 300 miles away, when they leave either of those communities. As a result, it was more convenient for the Tribal Administrators to attend work group meetings in Fairbanks. Difficulties also occurred as a result of staff turnover at ADEC, which resulted in the need for a 6-month extension of this project until March 2013. The extension did not affect the quality or quantity of outputs; however, it resulted in some confusion about who the ADEC project team should contact for various issues, such as requesting extensions on the project schedule and providing updates on project accomplishments.

California Department of Toxic Substances Control

Project Overview

The California Environmental Protection Agency (CalEPA), Department of Toxic Substances Control (DTSC), initially conducted an initiative titled "Building Healthy Communities and Schools in the Cities of Bell, Cudahy, and Maywood (Identify, Reduce and/or Eliminate)." However, DTSC later changed two of the cities from Bell and Cudahy to Wilmington and Commerce. Two of the three cities, Maywood and Commerce, are near each other, approximately 6 miles southeast of downtown Los Angeles. The populations of these cities range from approximately 25,000 to 35,000, and both are more than 90 percent Latino, with 24 to 30 percent of the residents below the poverty line. The City of Wilmington, California, is home to the Port of Los Angeles.



Under the initiative, DTSC worked with residents of each city to connect people who live closest to environmental and public health problems with local, state, and federal regulators (such as DTSC, the Regional Water Quality Control Boards, and air quality and public health agencies). Priority work was focused on environmental and multi-media impacts caused by freeways, rail yards, and industrial facilities in and around schools.

The majority of issues addressed under the SEJCA involved the color and potential chemical contamination in the tap water of the Maywood community. For more than a decade, community members have dealt with tap water that is frequently brown, bitter tasting, malodorous, and that sometimes contains red particulates. Under its EJ policy, DTSC has a responsibility to work with EJ stakeholders to develop cross-agency approaches to address iron and manganese in Maywood drinking water and to ensure that the community has a safe drinking water supply.

Project Goals and Major Activities

The goal of the DTSC initiative was to stop those breaking environmental laws and violating regulations and to provide a strong impetus for compliance overall. The initiative involved conducting Environmental Enforcement bus tours, workshops, data collection, and public education. The bus tours involved citizens riding to selected sites with federal, state, and local enforcement officials, followed by workshops to identify activities (such as inspections and development of small business compliance plans) for resolving the environmental exposure issues that were observed during the tour. Other activities included environmental and public health fairs and workshops for community members to learn how to collect environmental data.

Project Successes

The project has resulted in development of sustainable and mutually beneficial relationships between DTSC staff and the three communities that are based on trust and sharing of knowledge. DTSC's knowledge mostly involves environmental laws and regulations, whereas the community's knowledge mostly involves the locations of activities that need to be investigated because they appear to be placing community residents at risk from exposure to toxic substances. This sharing of knowledge has occurred at workshops and other meetings that are scheduled by community leaders and DTSC staff. In addition, DTSC assisted the U.S. Environmental Protection Agency Region 9 EJ staff in conducting and organizing a bus tour under SEJCA. The bus stopped at the locations covered under this grant and community members raised several environmental concerns at all three locations. DTSC staff is working with the community member to address these concerns. A major contribution to the growing trust between these cities and DTSC staff is DTSC's pledge to report progress using a scheduled and agreed-upon method (such as a letter, meeting, or telephone call) on each community issue within 100 days.

Examples of project successes include:

- On March 11, 2010, DTSC initiated a series of training programs for Maywood residents based on community input. The first training was Introduction to Toxicology.
- On April 8, 2010, DTSC gave training on inspections and enforcement to Maywood residents.
- On May 13, 2010, California Air Resources Board staff provided training on diesel truck emissions.
- On June 30, 2010, DPH Drinking Water Program staff gave a presentation to community residents on California's drinking water regulatory program and the status of Maywood drinking water. The training was provided in English and Spanish and was well received by participants.
- On August 25, 2010, DTSC staff provided training to Maywood community members on how to collect a drinking water sample. The training and coordination with the drinking water program were conducted in preparation for water sampling in homes and other locations in Maywood.
- Several meetings were held with community members to kick off water sampling in Maywood, discuss logistics, explain and assign roles and responsibilities, describe the protocol to be followed, and obtain permission from residents.
- In early 2011, after the sampling was conducted, DTSC held several meetings to explain the results to the residents of Maywood.
- A geologist who is working within the DTSC drinking water team provided graphic illustrations to the community members and people receiving sample results with general details about the sampling findings and the proximity of the sample locations to known Superfund sites within Maywood.
- On July 31, 2012, DTSC presented a summary of the previous water sampling (Phase 1) and proposed additional sampling (Phase 2) at a community meeting with Maywood city officials, water company representatives, residents, and activists. DTSC also prepared a fact sheet on the Phase 1 sampling for distribution at the meeting.
- On August 8, 2012, DTSC conducted the Phase 2 water sampling in Maywood, which included water company source wells, distribution lines, and selected residences.
- Sampling of five public Maywood City schools is planned after permission is obtained from the Los Angeles Unified School District.

- The report on the Phase 1 sampling is being finalized and a comprehensive report of all of the sampling will be finalized and shared with the Department of Public Health's Drinking Water Program, community representatives, and other interested parties.
- DTSC initiated a series of monthly training programs for Wilmington residents in September 2011. Topics were selected based on community input. Training is presented in Spanish and English. On September 26, 2011, training was provided on Inspections, Compliance, and Enforcement. On October 25, 2011, training was provided on DTSC's Permitting and Corrective Action process. On June 14, 2012, training was provided on California's Green Business Program.
- DTSC continues to coordinate its activities with members of the Los Angeles Environmental Coordinated Enforcement Collaborative to address the drinking water quality problems, and address community concerns about air quality. Current participants in this effort include the California Air Resources Board, the Los Angeles EJ Network, the Los Angeles County Local Enforcement Agency, Padres Unidos de Maywood, the Los Angeles Regional Water Quality Control Board, and the South Coast Air Quality Management District.
- DTSC has participated in regular meetings of the Los Angeles Environmental Justice Network. The forum includes members from several community-based environmental organizations. The forum meetings provide an excellent opportunity for information exchange on environmental justice activities and action items.
- DTSC participates in "roll-outs" that are carried out by members of the Los Angeles City Attorney Task Force where multi-jurisdictional agencies affiliated with the task force combine to perform joint unannounced inspections. The current focus is on the Wilmington area with sites that are directed by citizen complaints issued by the environmental unit of the city prosecutor's office as well as from other task force member recommendations.
- DTSC has collected data from all of the communities to update and ground truth the information from a DTSC database identifying generators, transporters, and treatment, storage, and disposal facilities and voluntary cleanup projects, orphan site work, and corrective action activities. This information is provided in maps at DTSC's[HYPERLINK "http://www.envirostor.dtsc.ca.gov/public/mapfull.asp?global_id=&x=-119&y=37&zl=18&ms=640,480&mt=m&findaddress=True&city=maywood&zip=&county=&federal_superfund=true&state_response=true&voluntary_cleanup=true&school_cleanup=true&ca_site=true&tiered_permit=true&evaluation=true&military_evaluation=true&school_investigation=true&operating=true&post_closure=true&non_operating=true"] These maps also have demographic information and information from the Water Boards showing underground storage tank locations and locations where releases were reported.

Insights from the Project Team

The interactions between DTSC staff and the residents from the three communities have greatly enriched the relationships between these parties, leading to greater efficiencies for DTSC staff through use of community knowledge in identifying environmental violations, and greater abilities of community residents to identify actual illegal discharges, emissions, and other activities by applying knowledge from DTSC presentations on environmental laws and regulations. In addition, DTSC staff has learned that large environmental justice organizations and networks have the capability of amplifying and expediting dissemination of training materials and grant opportunities. Without these organizations, DTSC would not have the budget needed to reach all the communities in California. In addition, hiring a student intern added major support for the ongoing work within the Maywood community. The intern's personal

knowledge of and experience in the issues that are occurring in Maywood stem from her long-time residency and her academic background in social anthropology. Following graduation, the student was hired by DTSC as a Public Participation Specialist.

Other insights from the project team reported by DTSC staff include:

- Keep objectives and action items of the grant activities realistic and achievable within each community given available staffing and resources.
- Identify grant activities that are of value to the communities and within the department's scope of responsibility. Community concerns and issues may not always be within DTSC's jurisdiction or legal authority.
- Obtain guidance from the grantor on the planned financial expenditures of the grant activities. Assign a department budgetary liaison to make sure that planned expenditures are allowable and within guidelines, thus avoiding disallowed expenditures and the need to repurpose monies at the end of the grant cycle.
- Assign roles and responsibilities of personnel working on the grant. Develop a communication strategy and work agreement so that there is a clear understanding of grant expectations and progress reporting.
- Solicit feedback from the community on whether the grant services provided were of value and made a difference with regard to community involvement, reducing health impacts, increasing knowledge and resources, and providing assistance.
- Do not set expectations that cannot be achieved. There is a lot of work involved in reaching out to communities and building trust.
- Allow for and adjust to the different needs, personalities, and priorities of each community.

Illinois Environmental Protection Agency

Project Overview

The City of East St. Louis, formerly called Illinoistown, has a population of about 30,000 with a median household income of about $21,000. About 98 percent of residents are African American. Post-war industrial abandonment led to loss of blue-collar jobs. White households moved out in large numbers, and the population declined by more than half. With shrinking tax rolls, local government has abandoned many services that are commonplace in other communities. Employed residents continue to move to communities that provide these basic amenities, and population loss and distress continue. More than half the residents live below the poverty level, and unemployment is around twice the state and national average. Almost two-thirds of the children in school are eligible for a free or reduced-price lunch.

East St. Louis has high risk areas where children have shown elevated blood lead levels. Elevated blood lead levels affect children's ability to learn and develop. Most of the lead exposure to children comes from lead paint (dust). Children from lower income families tend to have higher blood lead levels. East St. Louis also has a large aging housing stock. A large percentage of the housing stock is contaminated by lead.

The East St. Louis Residential Lead Paint Outreach Collaborative was formed to establish a collaborative and coordinated effort between the Illinois EPA, East Side Health District, St. Clair County Inter-governmental Grants Department/Community Development and other partners. This outreach and training initiative was designed to leverage ongoing programs at the local level to maximize use of local resources and reduce duplication of efforts.

Project Goals and Major Activities

The East St. Louis Residential Lead Paint Outreach Collaborative provided focused public awareness programs addressing childhood lead poisoning. In addition, the program leveraged partner activities such as lead paint sampling assistance by using an X-ray fluorescence sampling device provided by the Illinois Environmental Protection Agency (IEPA), and blood lead sampling for children by the East Side Health District. In addition, the St. Clair County Intergovernmental Grants Department accepted applications from community members to the lead abatement program.

The Illinois EPA Environmental Justice Officer served as the project leader and acted as a liaison between citizens, communities, and agency staff. The EJ Officer coordinated and facilitated EJ activities on behalf of the Illinois EPA with the advice of the EJ Advisory Group.

Project Successes

During 2010, in the first year of the project, IEPA provided lead brochures and literature for four workshops on the hazards of lead and the new repair, renovation and painting (RRP) rule in East Peoria, Carterville, O'Fallon and Palatine. In addition, the project team:

- Planned and participated in Earth Day festivals resulting in local youth and families learning more about lead poisoning.
- Held a press event with local TV news coverage.
- Participated in the Community Action for a Renewed Environment (CARE) -EJ National Conference in San Diego and provided a presentation for a partnership session.
- Visited three middle schools for outreach on lead.
- Certified individuals under the RRP rule through Emerson Park Community Development Corporation on December 15, 2010.
- Provided the city with a lead outreach booth for City Hall.
- Provided brochures, coloring books, and pamphlets about lead hazards to 50 people at a health fair sponsored by Southern Illinois Healthcare Foundation at its Belleville Health Clinic.
- Delivered 1,000 coloring books and brochures to four Southern Illinois Healthcare Facilities.
- Delivered 500 coloring books (English), two display posters, and 200 coloring books (Spanish) to be distributed on the St. Vincent DePaul Soup Bus.
- For National Lead Awareness Week, set up a display table with coloring books, pamphlets, flyers, and brochures in the atrium of the County Building between a bank lobby and the county's Health Department. Approximately 500 people were given information on lead.
- Formed a partnership with the Illinois Department of Commerce and Economic Opportunity to establish and participate in several lead workshops.
- In cooperation with the East Side Health District, held a parent educational class at Vivian Adams Early Childhood Center discussing lead hazard and awareness.
- Through St. Clair County Intergovernmental Grants, distributed 14 boxes of coloring books about lead (four in Spanish and 10 in English) to Southern Illinois Healthcare Foundation, Mother and Child Center-Centerville, Washington Park Health Center, and Fairmont Health Center.

Insights from the Project Team

-to be added

Pennsylvania Department of Environmental Protection

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Project Overview

This project, titled the Chester Home Asthma Prevention Program (CHAPP), was conducted within the limits of Chester, Pennsylvania, which encompasses a 6-square-mile area in Delaware County in southeastern Pennsylvania. The population is approximately 37,000 and is composed of approximately 75 percent African American, 19 percent White, and 5 percent Hispanic. The city once had thriving shipbuilding and manufacturing industries. Both industries have seen a steady economic decline since the 1960s. As jobs left the area, poverty rates increased, leaving more than a quarter of the population, and more than a third of the children, below the poverty line. The incidence of asthma in grades kindergarten through 12 in the Chester Upland School District is close to 24 percent.

Project Goals and Major Activities

The main goal of this project was to directly benefit children ages 0 to 17 with asthma in the project area by minimizing the number and severity of their attacks. To achieve this goal, the Pennsylvania Department of Environmental Protection (PA DEP) entered into partnerships with the Crozer-Keystone Health System (CKHS) and the Chester Environmental Partnership (CEP) to carry out environmental interventions in homes of asthmatic children in the City of Chester, to provide education about indoor asthma triggers, and to engage community members to address solid waste disposal problems which may trigger problems for children when they are outdoors.

CHAPP Project Goals

- Reduce the number and severity of asthma attacks using home intervention approach
- Clean up solid wastes, especially in areas near asthma sufferers

The CKHS hired three part-time peer counselors to conduct the home interventions and trained them with basic knowledge about childhood asthma, the important role of environmental remediation in decreasing asthma symptoms and the effect of outdoor environment on asthma. Program participants were identified through review of monthly pediatric CKHS Emergency Department (ED) lists, referrals from area healthcare providers including school nurses, and self-referrals at community events. Patients' parents identified from ED listings were notified by mail that they were eligible to participate in the Chester City Asthma Prevention Program and were alerted that a peer counselor would call them to give them further information. An initial enrollment home visit by a peer counselor was scheduled if parents consented.

Asthma Reduction Activities

- Home interventions with training and tools
- Baseline testing with recognized test methods
- Six months of follow-up home visits

The project director and the peer counselor conducted a formal consent process during this enrollment visit and collected baseline data. This baseline data included demographic information, asthma history such as number of asthma-related ED visits or hospitalizations in the past 6 months, and whether the

parent had made any changes in the home to reduce asthma triggers. After the initial visit, the peer counselor conducted four additional 1-hour visits to the home to teach asthma self-management concepts using standardized lesson plans developed from the evidence-based curriculums of the *American Lung Association's Open Airways* and *You Can Control Asthma.* Peer counselors conducted a baseline EPA Asthma Home Environmental Checklist during the second home visit and collected a baseline Asthma Control Test (ACT).

During each visit, peer counselors also demonstrated ways of reducing environmental asthma triggers in the home. An asthma remediation kit was provided to the family, which included items such as roach and mice bait, allergen-proof pillow and mattress covers, storage bins, biodegradable non-toxic cleaning products, and cleaning supplies. The peer counselor explained how to use kit items, stressed integrative pest management techniques and the importance of keeping the environment free of dust, pet dander and mold, and of using high efficiency particulate air (HEPA) filters when vacuuming rugs (or eliminating rugs). Parents were taught about how to make their own, low–cost, non-toxic cleaning products. Families were empowered to be active partners with their health care providers, which included completing an Asthma Action Plan and sharing copies of this plan with significant others such as daycare and school nurses.

An Asthma Action Plan was provided to parents, and peer counselors tracked completion of these plans. One of the lessons taught centered on the proper use of asthma medications and medical devices such as spacers with inhalers. Peer counselors provided spacers and taught either or both the parent and child about their proper use and cleaning. Parents were often redirected back to their pediatric providers when miscommunication was detected. Some parents were referred to pediatric pulmonologists and allergists, smoking cessation programs, social services, and community resources depending on their needs and interests. The project director conducted a follow-up protocol to assist with any barriers to asthma management and collect further data to evaluate the intervention. This protocol consisted of a post-intervention 2-week phone survey, a 3-month phone survey, and a 6-month home visit. The post-intervention home visit collected six-month ACTs and an Asthma Home Environment Follow-Up Checklist, among other data.

Solid Waste Cleanup Activities

- Provide dumpsters near littered areas
- Engage residents to fill the dumpsters

The disposal problems in Chester were addressed by the CEP, a group of organizations that are focused on improving the lives of Chester residents. The CEP meets regularly and is composed of representatives from the U.S. EPA, the PA DEP, health institutions, local government, and local businesses and industry. The CEP leveraged assistance from the City of Chester to provide 30-cubic-yard dumpsters at a number of locations and engaged Chester residents to fill the dumpsters with waste that had accumulated in vacant lots. The selection of the locations for the dumpsters was assisted by the CKHS, which has data on which locations are nearest to significant numbers of asthma sufferers.

Project Successes

A total of three individuals successfully completed the peer counseling, train-the-trainer sessions. All of the peer counselors are Chester residents, and two are parents of asthmatic children; these counselors are effective role models and facilitators who act as a cultural bridge between families and their providers.

A total of 382 families were contacted, and a total of 132 children from 69 families enrolled from July 2010 through February 2012. Participants in the CHAPP saw enhanced conditions when it came to severity and control of asthma. For both children above and below the age of 12, there was a statistically significant improvement in ACT pre-and post-test scores, in addition to a statistically significant decrease in visits to the emergency room. The home intervention and education prompted families to make changes to reduce asthma triggers in the home and be more diligent in the necessary medical care. The improvement was especially great for children whose asthma was initially considered "severe" based on the standard for the ACT score. This substantial improvement for these kids suggests that CHAPP's intervention program, though helpful to all children, was especially beneficial for children who initially had less control over their asthma.

Asthma Reduction Successes

- Peer counselors established trust, which supported education and behavior change
- Significant improvement in post-program asthma control test (ACT) results
- Substantial decreases in emergency room visits
- Significant decreases in missed school days.

CHAPP's participants also showed improvements toward the goals involving the number of uses of rescue medications and the amount of school absences caused by asthma. There were substantial decreases in the number school days missed and the frequency of the use of rescue medications. On average, a child missed approximately 5 more days of school before the intervention than after. While there was no evidence of a difference in the number of doctor visits, it might be assumed that families who are proactive in improving a child's asthma conditions, such as the families who enrolled themselves in CHAPP's intervention program, would be diligent in keeping up with regular appointments and check-ups with the doctor.

The success of the solid waste cleanup program in Chester was evidenced by the large numbers of residents who participated in at least 10 large cleanup events, resulting in filling numerous dumpsters that were removed from the neighborhoods at no charge to the residents.

Insights from the Project Team

This project resulted in a number of insights, which are summarized below:

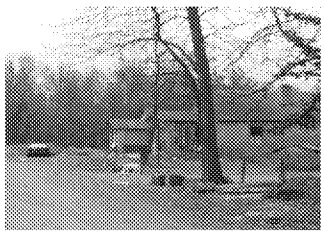
- Hire full time staff to yield larger number of participants for intervention and follow up as a result of the labor intensity and enrollment barriers for high-risk and disparate populations. Labor intensity includes outreach calls, rescheduling appointments, providing community outreach to recruit participants, networking with key stakeholders for referrals, collecting and tracking data, database development and data entry and quality assurance activities, and ongoing training/supervision.
- Plan adequate budget for above, including project evaluation budget.
- Use of asthma-friendly home kits not only serve as incentive items but offers participants experience trying practical ways to reduce common indoor asthma triggers.

- Maintain open and regular communication between project management staff and regional and state staff, which occurred with this project and allowed for timely problem solving.
- Consider expanding project funding period from 3 to 5 years to allow adequate start-up time and follow-up period (needed to stop enrollment in February 2012 to conduct 6-month follow up and was still unable to complete intervention and follow up on all clients).

South Carolina Department of Health and Environmental Control

Project Overview

The project involves implementing a new state pilot program called "Leaders in Environmental Action Pilots" (LEAP), which was designed to use collaborative problem-solving approaches to address the environmental and social justice concerns within four selected communities. The South Carolina Department of Health and Environmental Control (SC DHEC) worked with community-based non-profit organizations in each community, including [HYPERLINK "http://www.aplaceforhope.net"], representing the Blackmon Road neighborhood near Rock Hill, South Carolina; the [HYPERLINK "http://theimanigroup.org/mainsite/"], representing the community of Aiken, South Carolina; the [HYPERLINK "http://www.aikenhousing.org/cdic/about.htm"], representing residents in Graniteville, Warrenville, and Vaucluse (GWV) in Aiken County, South Carolina; and the [HYPERLINK "http://lamcnc.org/"], representing seven neighborhoods in North Charleston, South Carolina. The main issues to be addressed in the LEAP program are described below for each community:



Blackmon Road Community: This low-income community consists of 56 persons and is located less than a mile outside of the Rock Hill city limit within York County. Working with A Place for Hope, the community has identified a number of its environmental and social justice concerns, many of which involve some basic needs (such as water, electricity, and sewer) that have not been provided. The community wants to build capacity and empower the residents so that they will be better advocates for their needs.

Aiken Community: The focus area for this community and the Imani Group was initially around the Aiken airport. The original issue concerned radium possibly in the groundwater within some private wells in that area. However, this issue was changed because of administrative and technical issues involved in the measurement of radium in groundwater. The community has determined that it will now concentrate on developing a new coalition (the South Carolina Environmental Justice Advocacy Coalition) for conducting numerous EJ activities statewide, including talking about resources that are available to empower churches and communities to promote sustainability in their congregations and communities by providing educational resources, tool kits, and trainings.

GWV Communities: The GWV mill town communities worked with CDIC to address multi-fold issues. First, in 2005, a train derailment resulted in a chlorine leak that damaged the mill and affected the health of many people living in the area; nine people died during the derailment, at least 525

people were treated in the emergency room, and more than 5,000 individuals were evacuated for more than 10 days. The existence of Brownfield sites in the community resulted from the closure of Avondale Mills, a textile manufacturing company. Closing the nine buildings that housed Avondale Mills resulted in more than 2,000 lost jobs and left more than 1.25 million square feet of vacant building space. The community had to take on an additional financial burden of the aged, malfunctioning water system that also was abandoned by Avondale Mills. This old system threatens the outlook for successful industrial and commercial redevelopment.

North Charleston Neighborhoods: The seven area neighborhoods of Accabee, Chicora/Cherokee, Five Mile, Howard Heights, Liberty Hill, Windsor, and Union Heights have been working with LAMC. The communities had officially organized in 2005 as a direct result of the General Assembly's actions to locate a marine port terminal on a local former naval base. This change has made it crucial for the seven neighborhoods to be educated on ways to improve their ability to influence how these changes will affect their communities; including additional truck and rail traffic, air emissions, groundwater runoff, and how it has the potential to further impair an already contaminated area.

Project Goals and Major Activities

The main goal of the SC DHEC LEAP project was to assist in the redevelopment of four communities by building and strengthening collaborative relationships with local non-profit organizations, decision makers, and other stakeholders. To achieve this goal, the SC DHEC issued a competitive grant application and awarded $25,000 to each of four communities in February 2010 (just 4 months after beginning its SEJCA project) based on how each community described how it would address community-specific EJ concerns. The SC DHEC used the remaining $60,000 of its SEJCA funding to host a kickoff meeting and three workshops for the pilots and to pay for a part-time graduate student to assist with LEAP. SC DHEC arranged for these four communities to receive significant guidance and advice from a number of state and federal partners based on the types of issues the communities were involved in.

The SC DHEC provided much of its guidance in regular conference calls with each of the four LEAP communities; however, the majority of assistance from the state and federal offices was provided at four major meetings, including a kickoff meeting on May 2010 in Spartanburg, and three additional meetings held in December 2010, May 2011, and May 2012. The agenda for the kickoff meeting was designed to stimulate ideas and dialogues among the four community-based organizations and numerous state and federal representatives knowledgeable about various programs and resources aimed at community improvements. In the second meeting, held in December 2010, various state and federal agencies were invited to the "Economic, Environmental, and Sustainable Summit" to hear from the LEAP pilots to offer advice on how they could best work together to bring about revitalization within their communities. The last two meetings were more centered on presentations by each of the four community representatives on their progress to date; each of the workshops had a facilitator or speaker who was able to provide assistance and guidance to the LEAP pilots.

Project Successes

The SC DHEC was able to provide significant assistance to all four of the LEAP pilots, and in doing so forged a number of state, federal, academia, and private partnerships that can now continue assisting these community organizations toward their individual goals. The SC DHEC LEAP project directly benefited the SC DHEC staff and the EPA Region 4 staff, because they got to know the issues and people in these communities so well that they are now able to send them information on grants, travel scholarships to conferences, and other opportunities that are tailored to their needs. In addition, the community groups were exposed to insights and knowledge from organizations such as the Department of Transportation, the U.S. Economic Development Administration (EDA), the Small Business Administration, the U.S. Department of Agriculture, Rural Development Program, and several local colleges, such as the University of South Carolina, Aiken Technical College, Bennet College, and Winthrop College. Other successes achieved through collaboration with these four organizations are presented below by community:

Blackmon Road Community: One of the first items performed in association with LEAP was to hold a listening session for the residents. The residents provided input on three main topics of discussion, including (1) general concerns; (2) housing and environmental sustainability; and (3) the composition of the board of the non-profit organization, A Place for Hope. Using the outputs of that meeting, the community developed a prioritized list of needed improvements, accomplishing many of them through the three years. For example, leadership classes were provided to a number of community residents, and A Place for Hope hired a contractor to prepare the "Blackmon Road Community area Constructed Wetlands Assessment and Wastewater Management Report," which provided several innovative options for addressing the community's lack of adequate wastewater systems. In addition, meetings have been held with engineers and other agencies to provide assistance with designing affordable septic systems that will work with the unique geology of the area. With SC DHEC's assistance, the community also applied for a small EJ grant from EPA to conduct a survey that is needed before a final decision is made on the wastewater improvement design. As result of LEAP, community residents have improved their maintenance of the washhouse facility, grounds, and their own yards. There are also many more adults enrolled in higher education now than there were in the previous year.

Aiken Community: Technical issues involving the measurement of radium in groundwater resulted in a refocusing of the work by the Imani Group in the Aiken community from testing local wells to developing a new coalition (the South Carolina Environmental Justice Advocacy Coalition). This new direction for the community was inspired by its involvement in the meetings with SC DHEC, EPA, the other four LEAP communities, and other stakeholders that were held as part of the LEAP pilots. The Imani Group and the Aiken community forged a strong partnership with the other three LEAP communities, which are now contributing to the formation of a statewide environmental justice network.

GWV Communities: Successes included three major community meetings and visioning sessions focused on upcoming Brownfields assessments; a documentary, "Graniteville: Past, Present, and Future," which was shown at well-attended screenings in Graniteville and Augusta; a 2.5-day visioning session with the Urban Land Institute (ULI), including a tour and panel of architects and

engineers as part of a three-phase process with the goal of creating a master redevelopment plan for GVW; a follow-up meeting with ULI to discuss achievements, obstacles, and re-focusing; getting the county council to hold one of its monthly meetings in Graniteville to help rebuild trust between the county, the towns, and the residents, and to give residents a voice in their government. In addition, residents are becoming more involved in revitalization efforts as a result of numerous communications using word of mouth, newsletters, social media, and community events; and contributions to the successes of many other local efforts, including a National Institutes of Health (NIH) grant for $2.9 million to conduct a lung function health study for 650 workers injured in the train derailment, a $250,000 grant headed by Dr. Sacoby Wilson (formerly of the University of South Carolina) focused on community-based participatory research, and establishment of a community health clinic.

North Charleston Neighborhoods: The community was the first in the United States to achieve a community mitigation plan under the National Environmental Policy Act (NEPA) because of its involvement and engagement in the process related to the expansion of the Port of Charleston. It has received $4.08 million in mitigation funds that the city is managing on behalf of the community. LEAP funded two staff positions and operating expenses for LAMC, allowing development of four quarterly newsletters with distribution to 3,000 community members, five press releases to mainstream media, more than 25 major community events and at least 14 grant applications totaling about $25,000 in awards. LEAP also funded a board assessment and board training on building organization capacity and development within the organization. LEAP contributed to other successes that include a $5,000 grant from Healthy North Charleston, a $3,000 grant used to establish two community gardens, a $1,000 grant to establish an accounting system, and a $25,000 National Trust for Historic Preservation grant to host two Amtrak visioning session workshops to develop plans for the future reuse of an existing Amtrak station that Amtrak will no longer use in a low-income neighborhood. In addition, a National Institute of Environmental Health Sciences (NIEHS) grant in partnership with the University of North Carolina and the University of Maryland (UMD) will be used to assess the geographic distribution of pollution sources.

> Running this program from a hospital was extremely helpful. Additionally, the fact that the hospital was in the community was an added benefit that likely lead to better trust issues.

Insights from the Project Team

The SC DHEC learned that South Carolina agencies generally are not familiar with the term "environmental justice;" therefore, further definition of this term was needed when it was used to enlist the assistance of these agencies in the LEAP pilots. In addition, SC DHEC staff working on LEAP noted that inputs from technical staff within SC DHEC program offices were helpful for developing potential solutions to community issues, and that involvement with the LEAP project improved their understanding of EJ issues.

Blackmon Road Community: A greater-than-expected education effort was needed to raise the level of understanding among community member about the issues they face. Therefore, more education at the beginning of the project may have improved communications with community residents. According to an SC DHEC representative, an important realization for members of the Blackmon

Road community was that they are the only ones who can truly bring about the changes they want for their community.

Aiken Community: This project had to adjust its focus from radium testing to building an EJ network in South Carolina. This adjustment was in part the result of interagency conflict over development of a quality assurance project plan (QAPP) for the radium testing and household filters project. These experiences illustrate the need to reduce competition between agencies and among offices at EPA, which has hampered some of the community's efforts. The community also discussed the importance of communicating the interrelated nature of issues of violence, community health, and EJ. The vision for the EJ coalition is to educate, empower, and provide full-service activism, and that a coalition will try to recreate the LEAP process for other EJ groups around the state. At the same time, there needs to be systemic change in how agencies work together and how they function internally so that they can more holistically serve the needs of EJ communities.

GWV Communities: A SC DHEC representative noted that her exchanges with this community indicated that CDIC needed to communicate more proactively and transparently with the community residents and other stakeholders to begin to obtain their trust. The need for better communication was especially important, since CDIC's leaders do not reside in the community. In addition, CDIC struggled with a community perception that it did not fully represent the concerns of local residents.

North Charleston Neighborhoods: LAMC recognized that although it had a number of successes, it needed to grow and strengthen its board of directors to sustain its organization. The board also wished to hire an executive director, but did not have the capability to maintain this position. As a result, LAMC hired a consultant to assess the current board and conduct a workshop for LAMC members. LAMC is now more aware of how to assemble and operate an effective board of directors. The consultant noted that a board of directors should be focused on "bigger picture" items that will assist with achieving its goals. LAMC has also learned that it does not need an Executive Director or staff assistance to handle day-to-day activities.